WHAT IS CLAIMED:

1. A composite comprising a poly(methyl methacrylate) matrix having dispersed therein conductive transition metal nanoparticles, which dispersion is stabilized by a thiol-functionalized stabilizing agent, wherein the difference between the solubility parameter of the poly(methyl methacrylate) and the stabilizing agent is less than or equal to 3.

2. The composite of Claim 1 wherein the volume/volume concentration of the nanoparticles in the poly(methyl methacrylate) matrix is in the range of 1.5 to 10 percent and wherein the solubility parameter of the poly(methyl methacrylate) and the stabilizing agent is less than or equal to 2.

3. The composite of Claim 2 wherein the conductive nanoparticles are gold or silver.

4. The composite of Claim 3 wherein the conductive nanoparticles are gold and wherein the thiol functionalized stabilizing agent is dodecanethiol or octadecanethiol or a thiol-functionalized block copolymer or a thiol-compatibilized polycaprolactone or combinations thereof.

5. The composite of Claim 3 wherein the stabilizing agent is present in the composite in an amount in the range of from 1 to 10 weight percent.

6. The composite of Claim 2 which is mixed with a compatible solvent to make an ink.

7. The composite of Claim 6 wherein the solvent is propyleneglycolmonomethylether acetate, ethyl acetate, isopropyl acetate, butyl acetate, tetrahydrofuran, toluene, xylenes, or mesitylenes.